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घरेलू जूस एक्सट्रैक्टर — विशिष्टि  
( पहला पुनरीक्षण )

**Domestic Juice Extractor —  
Specification**  
( *First Revision* )

ICS 97.040.60

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## FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Utensils, Cutlery and Domestic Hardware Sectional Committee had been approved by the Mechanical Engineering Division Council.

This standard was first published in 1975. The present revision has been taken up with a view to incorporating the modifications found necessary as a result of experience gained on the use of this standard. Also, in this revision, the standard has been brought into the latest style and format of Indian Standard, and references to Indian Standards, wherever applicable have been updated. The BIS certification marking clause has been modified to align with the revised *Bureau of Indian Standards Act*, 2016. The following major modifications have been incorporated in this revision of the standard:

- a) Scope has been modified; and
- b) Provision of new material (stainless steel) has been added.

The relevant SI units and corresponding conversion factors are given below for guidance:

$$\begin{aligned} 1 \text{ kgf/cm}^2 &= 98.066 5 \text{ kPa (kilopascal)} = 10 \text{ m of water column (WC)} \\ &= 0.098 066 5 \text{ MPa (megapascal)} \\ &= 0.980 665 \text{ bar} \\ 1 \text{ Pa} &= 1 \text{ N/m}^2 \end{aligned}$$

The composition of the Committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***DOMESTIC JUICE EXTRACTOR — SPECIFICATION***( First Revision )***1 SCOPE**

This standard covers the requirements for domestic juice extractors used for extracting juice and for crushing soft fruits and vegetables.

**2 REFERENCES**

The standards given below contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards:

<i>IS No.</i>	<i>Title</i>
IS 21 : 1992	Wrought aluminium and aluminium alloys for manufacture of utensils — Specification ( <i>fourth revision</i> )
IS 280 : 2006	Mild steel wire for general engineering purposes ( <i>fourth revision</i> )
IS 617 : 1994	Cast aluminium and its alloys — Ingots and castings for general engineering purposes — Specification ( <i>third revision</i> )
IS 1068 : 1993	Electroplated coatings of nickel plus chromium and copper plus nickel plus chromium — Specification ( <i>third revision</i> )
IS 1868 : 1996	Anodic coatings on aluminium and its alloys — Specification ( <i>third revision</i> )
IS 6057 : 1988	Specification for hard anodic coatings on aluminium and aluminium alloys ( <i>first revision</i> )
IS 6527 : 1995	Stainless steel wire rods — Specification ( <i>first revision</i> )
IS 6911 : 2017	Stainless steel plate, sheet and strip — Specification ( <i>second revision</i> )

**3 MATERIAL****3.1 Body, Feed Worm, Crank and Wing Screws**

The body, feed worm, crank, and wing screws cast aluminium alloy conforming to designation 5500 or

4300 of IS 617 or stainless steel conforming to grade 304 LN/304 N as per IS 6911.

**3.2 Strainer**

The strainer shall be made of any grade of aluminium alloy conforming to IS 21 or stainless steel conforming to grade 304 LN/304 N as per IS 6911.

**3.3 Clamp Screw**

The clamp screw shall be made of mild steel wire conforming to IS 280 or stainless steel conforming to IS 6527.

**3.4 Handle and Presser**

The handle and presser shall be made of any suitable wood well-seasoned and free from centre heart, decay, checks, shakes, splits, holes, warp, and any defect likely to affect utility of the components.

**4 SHAPE AND DIMENSIONS**

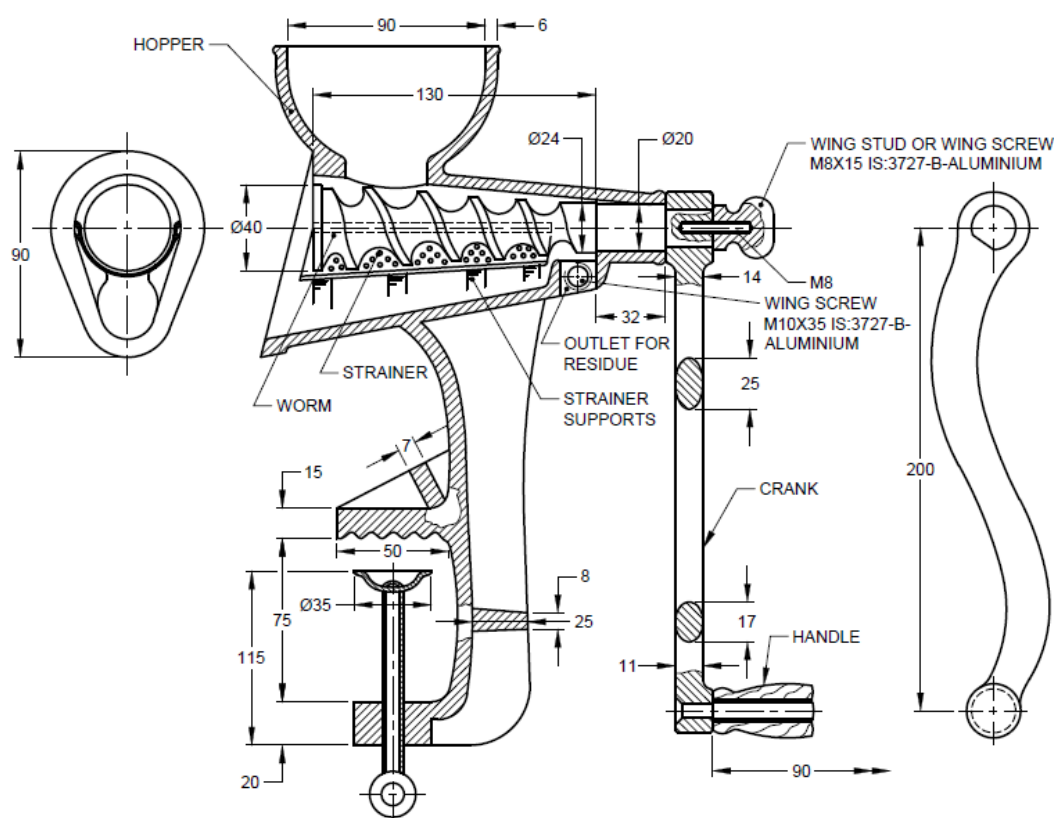
The typical shape of juicer is shown below (*see* Fig. 1).

**5 WORKMANSHIP AND FINISH**

**5.1** The feed worm shall have a tapered shank with diminishing pitch towards the handle. The spiral shall be ground to sharp square edge. It shall have a smooth finish all over and the bearing surface shall be turned smooth for free running. There shall be reasonable clearance between the spiral and walls of the body so that the spiral does not touch the body at any place.

**5.2 Body**

Body shall be cast smooth (outside and inside) and shall be free from blow holes, pits, cracks and other casting defects. It shall be well dressed and fettled and shall be readily machinable. The clamping base of the body shall be of sufficiently thick cross section so as to resist any breakage during clamping. The clamping washer shall be affixed to the clamp screw in such a manner that it shall not be liable to come out during use. The lower portion of the body shall be sloped down towards the front so as to permit easy flow of juice into the receptacle placed underneath. The body shall have two parallel horizontal grooves inside to keep the strainer in position.



All dimensions in millimetres.

FIG. 1 EXTRACTOR, JUICE, DOMESTIC, TYPICAL

**5.3** Strainer shall be shaped in such a manner as to be easily fitted and removed from the body of the juice extractor and shall not hinder the rotation of the feed worm.

**5.4** All the components shall have good workmanship and shall be free from defects which affect appearance or serviceability. Assembled juice extractor shall have perfect alignment and shall not have any excessively loose or jammed part.

**5.5** The aluminium parts of the juice extractor may be anodized according to grade AC15 of IS 1868 or hard anodized as per IS 6057, subject to agreement between the manufacturer and the purchaser. The clamp screw and washer shall be plated chromium over nickel in accordance with service condition number 2 of IS 1068. The wooden handle shall be lacquered.

## 6 TESTS

### 6.1 Performance Test

The juice extractor shall be capable of extracting juice satisfactorily without jerks or excessive strain.

## 7 MARKING

**7.1** The juice extractor shall be marked with the manufacturer's name or recognized trade-mark, country of manufacture and an arrow mark near the hub of the body showing the direction of rotation of crank handle.

**7.2** Each juice extractor shall be provided with an instruction sheet stating the directions for use and maintenance, and a guarantee certificate to the user.

### 7.3 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

## 8 PACKING

The juice extractor shall be packed according to trade practice to afford adequate protection against damage during transit. Alternatively, it may be packed as agreed to between the manufacturer and the purchaser.

**ANNEX A***(Foreword)***COMMITTEE COMPOSITION**

Utensils, Cutlery and Domestic Hardware Sectional Committee, MED 33

<i>Organization</i>	<i>Representative(s)</i>
In Personal Capacity (A-504, K.G. Chandra Vista, OMR, Opposite to Satyabhama University, Sholinganallur, Chennai - 600119)	SHRI G. SHANMUGANATHAN ( <b>Chairperson</b> )
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Directorate General Quality Assurance, Ministry of Defence, Kanpur	SHRI M. SATYANARAYANA
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Hawkins Cookers Ltd, Thane	SHRI RAJESH SHARMA SHRI RAVINDRA MALI ( <i>Alternate I</i> ) SHRI SANJAY SASIKUMAR ( <i>Alternate II</i> )
Hindalco Industries Ltd, Sonbhadra, Mumbai	SHRI DEVESH KUMAR SHRI ATUL GUPTA ( <i>Alternate</i> )

<i>Organization</i>	<i>Representative(s)</i>
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Jindal Stainless Ltd, Hisar	SHRI BISWABASU ROY SHRIMATI NISHA GOEL ( <i>Alternate</i> )
Office of Development Commissioner (MSME), New Delhi	SHRI SUVANKAR SANTRA
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Sat Rattan Engineering Works, New Delhi	SHRI G. L. KHERA
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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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